

WHAT IS CLAIMED IS:

1. A manufacturing method for a signal transmitting belt of a heart rate monitor, comprising steps of:
  - (a) providing an injection molding assembly, a conductive chest belt, and a first shaft body;
  - (b) placing said first shaft body and said conductive chest belt inside said injection molding assembly and injecting a molding material into said injection molding assembly to form an insulating chest belt;
  - (c) removing said first shaft body;
  - (d) providing a main body; and
  - (e) mounting a second shaft body at a same position of said first shaft body for connecting said insulating chest belt and said main body so as to accomplish said signal transmitting belt.
2. The manufacturing method according to claim 1, wherein said first shaft body further comprises at least one impact bearing mounted at an end thereof for sustaining an impact force during said injecting.
3. The manufacturing method according to claim 2, wherein said first shaft body further comprises at least one junction at said end thereof for being connected with said at least one impact bearing.
4. The manufacturing method according to claim 2, wherein said at least one impact bearing is removed together with said first shaft body after said insulating chest belt is formed.
5. The manufacturing method according to claim 1, wherein said main body further comprises a signal transmitter mounted therein for transmitting a heartbeat signal.

6. The manufacturing method according to claim 5, wherein said conductive chest belt further comprises a protrudent portion having a signal transmitting hole thereon for transmitting said heartheat signal therethrough.
7. The manufacturing method according to claim 6, wherein said signal transmitting belt further comprises a first spring mounted on said second shaft body and a first screw mounted on said conductive chest belt through said signal transmitting hole.
8. The manufacturing method according to claim 7, wherein said first spring is screwed onto said conductive chest belt by said first screw for transmitting a heartbeat signal to said second shaft body.
9. The manufacturing method according to claim 8 further comprising a washer screwed together with said first spring through said first screw so that said first spring is screwed onto said conductive chest belt under an even pressure.
10. The manufacturing method according to claim 7, wherein said conductive chest belt further comprises an axle hole for mounting said second shaft body therethrough.
11. The manufacturing method according to claim 10, wherein said first spring is mounted inside said axle hole of said insulating chest belt.
12. The manufacturing method according to claim 10, wherein said insulating chest belt and said main body are assembled together both through side portions thereof to cooperatively form said axle hole for passing through said connecting element.
13. The manufacturing method according to claim 12, wherein said first shaft body and said second shaft body both have a flange thereon for being pushed against said first spring mounted inside said axle hole.

14. The manufacturing method according to claim 6, wherein said signal transmitting belt further comprises a second spring mounted on said second shaft body and a second screw mounted on said main body.
15. The manufacturing method according to claim 14, wherein said second spring is looped around said second shaft body for transmitting said heartbeat signal from said second shaft body to said signal transmitter of said main body.
16. The manufacturing method according to claim 1, wherein said signal transmitting belt further comprises a skidproof slice mounted in an indentation of said main body for preventing said second shaft body from coming off.
17. The manufacturing method according to claim 1, wherein said main body further comprises an upper cover and a lower cover.
18. The manufacturing method according to claim 17, wherein said upper cover and said lower cover further comprises a fixing bearing and an auxiliary bearing respectively for fixedly mounting said second shaft body therebetween.
19. The manufacturing method according to claim 1, wherein said second shaft body is a round-shape shaft.
20. The manufacturing method according to claim 1, wherein said insulating chest belt has a rotating angle of  $180^{\circ}$  corresponding to said main body for providing a flexibility to said signal transmitting belt when being used.
21. The manufacturing method according to claim 1, wherein said molding material is an insulating material.
22. A manufacturing method for a signal transmitting belt of a heart rate monitor, comprising steps of:

- (a) providing an injection molding assembly, a conductive inner belt;
- (b) placing said conductive inner belt inside said injection molding assembly;
- (c) injecting a molding material into said injection molding assembly to form an insulating chest belt;
- (d) providing a shaft body and a main body; and
- (e) connecting said main body and said insulating chest belt via said shaft body so as to accomplish said signal transmitting belt.